

**What is claimed is:**

1. A thickness module device used in making different thickness of biofilms comprising ;

a pair of dish including a dish bottom and a dish cover;

5        an internal thickness module having a number of protrusions of different heights or of the same height on its underside for producing the thickness of biofilms; and having a number of protrusions of same height on its above for using a cover

10       2. A thickness module device as defined in claim 1 wherein the thickness module device is made of plastic, glass or metal.

3. A thickness module device as defined in claim 1 wherein the different thickness of biofilms is between 0.05mm to 20mm.

4. A thickness module device as defined in claim 3 wherein the biofilm means is bacteria, actinomyces, fungi or mixed of microbes.

15       5. The matrix of the medium to construct the biofilm thickness by the thickness module device is agar or gel.

6. The matrix of medium as defined in claim 5 wherein the agar is suitable for tested microbes growth.

20       7. Apparatus for testing the effect of various biofilms on the adhesion and corrosion, the apparatus comprising the plural small covers that for closing the top of biofilm thickness.

8. The apparatus as defined in claim 7 wherein the plural small covers are made of plastic, rubber, glass, metal, alloy, implantable or insertable medical material.

25       9. The apparatus as defined in claim 8 wherein the plural small covers is constructed in the form of circle, square or irregular.